

# Influenza Weekly Surveillance Report



**A REPORT BY THE HEALTH PROTECTION SURVEILLANCE CENTRE IN COLLABORATION WITH THE IRISH COLLEGE OF GENERAL PRACTITIONERS, THE NATIONAL VIRUS REFERENCE LABORATORY & THE DEPARTMENTS OF PUBLIC HEALTH.**

**Week 45 2005 (7<sup>th</sup> to 11<sup>th</sup> Nov 2005)**

## Summary

During week 45 2005, influenza activity was at low levels in Ireland, with 11 influenza-like illness (ILI) cases reported by sentinel GPs. To date this season, no positive influenza specimens have been detected by the NVRL.

## Background

This is the sixth season of influenza surveillance using computerised sentinel general practices in Ireland. The Health Protection Surveillance Centre (HPSC) is working in collaboration with the Irish College of General Practitioners (ICGP), the National Virus Reference Laboratory (NVRL) and the Departments of Public Health on this sentinel surveillance project. Thirty-nine sentinel general practices have been recruited to report on the number of patients with ILI on a weekly basis. ILI is defined as the sudden onset of symptoms with a temperature

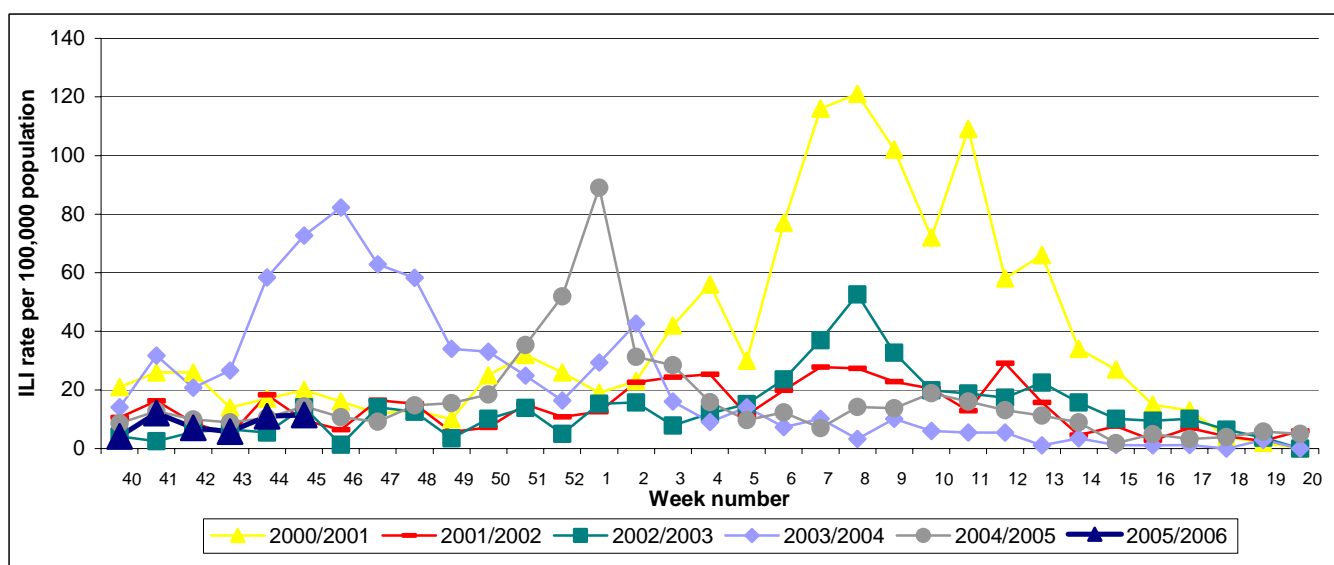
of 38<sup>0</sup>C or more, with two or more of the following: headache, sore throat, dry cough and myalgia.

Sentinel GPs send a combined nasal and throat swab, to the NVRL, on at least one patient per week where a clinical diagnosis of ILI is made. This report includes data on ILI cases reported by sentinel GPs, influenza test results from the NVRL, influenza notifications, registered deaths attributed to influenza, and regional influenza activity reported by the Departments of Public Health.

## Results

### Clinical Data

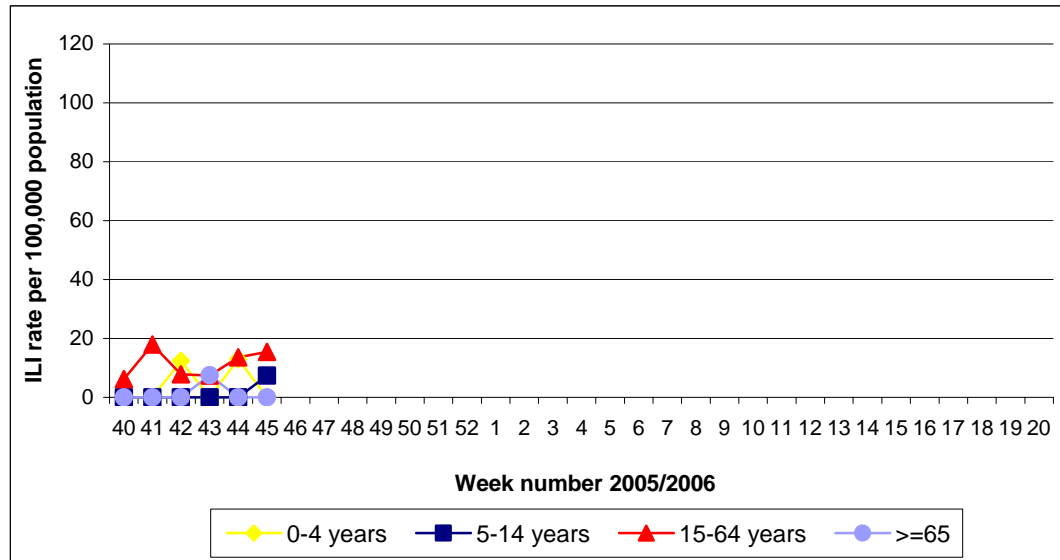
Eleven ILI cases were reported from sentinel GPs during week 45 2005, corresponding to an ILI consultation rate of 11.5 per 100,000 population, unchanged from the updated rate of 11.0 per 100,000 population during week 44 2005 (figure 1).



**Figure 1:** GP consultation rate for ILI per 100,000 population by week, during the 2000/2001, 2001/2002, 2002/2003, 2003/2004, 2004/2005 & 2005/2006 influenza seasons.

## Results (continued)

Ten ILI cases were aged between 15 and 64 years of age (15.4 per 100,000 population) and one case was aged between 5 and 14 years (7.4 per 100,000 population) (figure 2). Thirty (76.9%) sentinel general practices reported during week 45 2005, with six reporting ILI.



**Figure 2:** Age specific GP consultation rate\* for ILI per 100,000 population by week during the 2005/2006 influenza season. \*Please note the denominator used in the age specific consultation rate is from the 2002 census data; this assumes that the age distribution of the sentinel general practices is similar to the national age distribution.

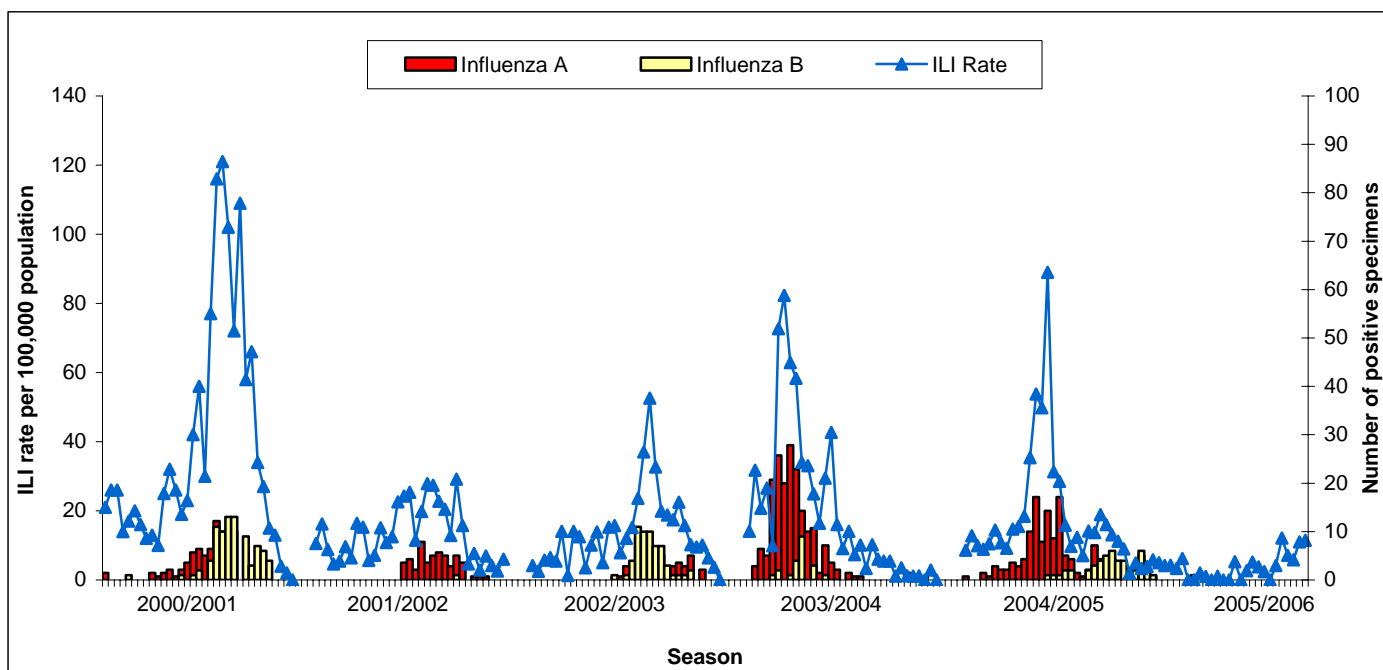
### Virological Data from the National Virus Reference Laboratory (NVRL)

To date this season, no positive influenza specimens have been detected by the NVRL (table 1). The NVRL tested seven specimens taken by sentinel GPs during week 45 2005, all seven specimens were negative for influenza virus. The NVRL also tested 43 non-sentinel specimens, taken during week 45 2005, mainly from hospitalised paediatric cases. All non-sentinel specimens were negative for influenza virus. Nine non-sentinel specimens were positive for respiratory syncytial virus (RSV). Figure 3 compares the ILI consultation rates by season and the number of positive influenza specimens tested by the NVRL.

**Table 1:** Total number of sentinel and non-sentinel\* respiratory specimens and positive results for week 45 2005 and the 2005/2006 season to date.

| Week Number       | Specimen Type | Total Specimens | No. Influenza Positive | % Influenza Positive | Influenza A | Influenza B | RSV       |
|-------------------|---------------|-----------------|------------------------|----------------------|-------------|-------------|-----------|
| <b>45 2005</b>    | Sentinel      | 7               | 0                      | 0.0                  | 0           | 0           | NA        |
|                   | Non-Sentinel  | 43              | 0                      | 0.0                  | 0           | 0           | 9         |
|                   | <b>Total</b>  | <b>50</b>       | <b>0</b>               | <b>0.0</b>           | <b>0</b>    | <b>0</b>    | <b>9</b>  |
| <b>40-45 2005</b> | Sentinel      | 38              | 0                      | 0.0                  | 0           | 0           | NA        |
|                   | Non-Sentinel  | 204             | 0                      | 0.0                  | 0           | 0           | 29        |
|                   | <b>Total</b>  | <b>242</b>      | <b>0</b>               | <b>0.0</b>           | <b>0</b>    | <b>0</b>    | <b>29</b> |

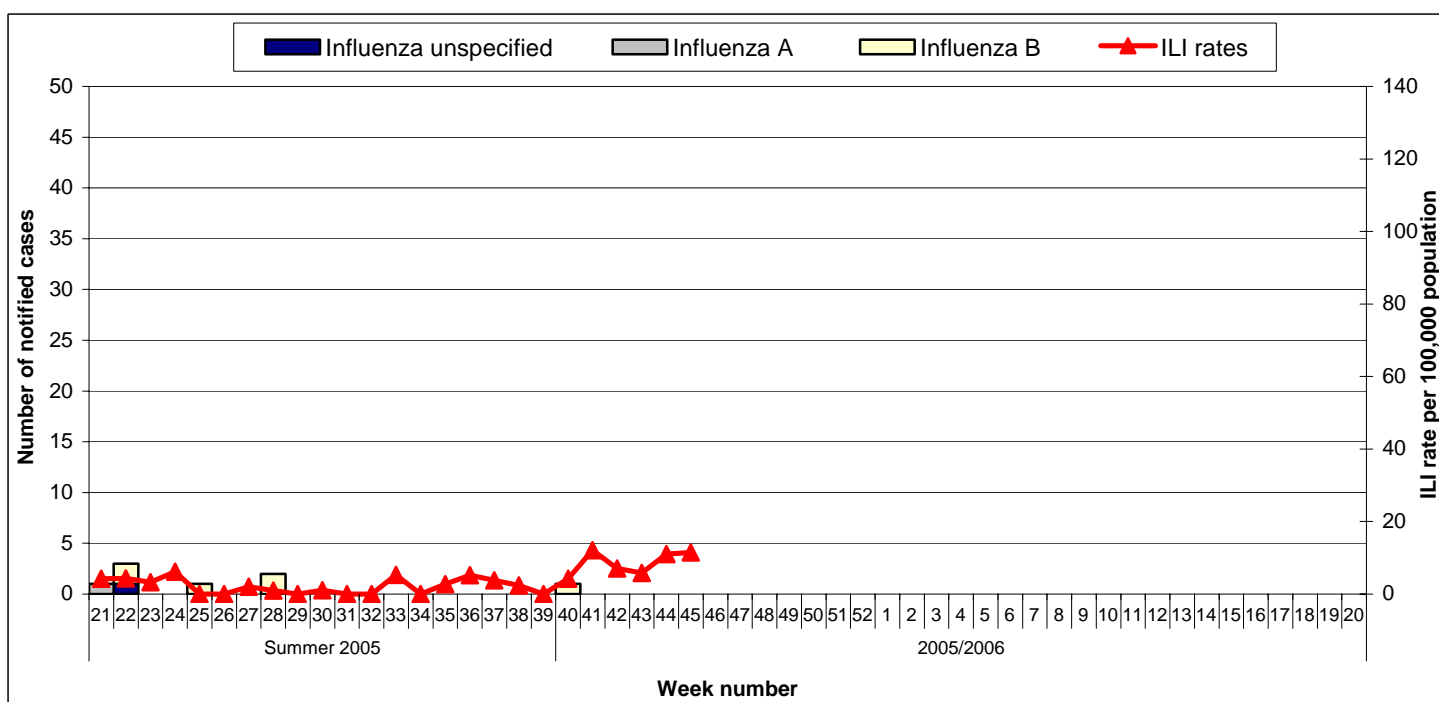
\*Please note that non-sentinel specimens include all specimens referred to the NVRL, these specimens are mainly from hospitals and some GPs and may include more than one specimen from each case.



**Figure 3:** ILI rate per 100,000 population and the number of positive influenza specimens detected by the NVRL during the 2000/2001, 2001/2002, 2002/2003, 2003/2004 & 2004/2005 seasons, summer 2005 and the 2005/2006 season.

### Weekly Influenza Notifications

No influenza notifications were reported to HPSC during week 45 2005. One influenza B case was notified to HPSC during week 40 2005, however this was a late notification from April 2005. Influenza cases notified to HPSC during the summer of 2005 and during the 2005/2006 influenza season are shown in figure 4, and compared to ILI consultation rates.



**Figure 4:** Number of notifications\* of influenza (possible & confirmed) by type and by week of notification compared to sentinel GP ILI consultation rates per 100,000 population during the summer of 2005 and the 2005/2006 influenza season.  
 \*Notification data are provisional and were extracted from [CIDR](#) on the 17/11/2005 at 14.06.

### ***Mortality Data***

No deaths registered to date this season were attributed to influenza.

### ***Outbreak Reports***

No influenza/ILI outbreaks were reported to HPSC to date this season.

### ***Hospital Admissions***

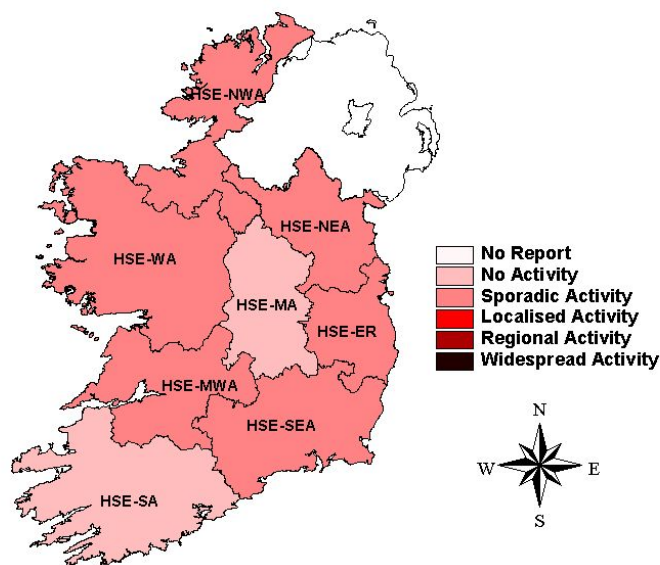
Each Department of Public Health has established one sentinel hospital in each HSE-Health Area, to report total hospital admissions, accident and emergency admissions and respiratory admissions data on a weekly basis. No significant increases in hospital admissions were reported to HPSC to date this season.

### ***School Absenteeism***

Sentinel primary and secondary schools have been established in each HSE-Health Area in close proximity to the sentinel GPs, reporting absenteeism data on a weekly basis. No significant increases in school absenteeism were reported to HPSC to date this season.

### ***Regional Influenza Activity by HSE-Health Area***

Influenza activity is reported on a weekly basis from the Departments of Public Health. Influenza activity is based on sentinel GP ILI consultation rates, laboratory confirmed influenza cases and influenza/ILI outbreaks. Six HSE-Health Areas reported sporadic influenza activity during week 44 2005 (figure 5), based on isolated cases of ILI. A sporadic case of ILI was reported from a nursing home in HSE-NEA during week 43.



**Figure 5:** Map of influenza activity by HSE-Health Area during week 44 2005

### ***Influenza Activity in Northern Ireland***

Twenty-four influenza and ILI cases were reported from sentinel GPs in Northern Ireland during week 45 2005, corresponding to a rate of 19.2 per 100,000 population, a decrease from the updated rate of 23.6 per 100,000 in week 44. There have been no laboratory detections of influenza to date this season in Northern Ireland. <http://www.cdscni.org.uk>

### ***Influenza Activity in England, Scotland & Wales***

Clinical indicators of influenza activity in England, Scotland and Wales were at low levels during week 45 2005. GP consultations for ILI remain at baseline levels. Detections of influenza and other respiratory viruses from specimens sent from hospital and community sources remain within expected levels for this time of year. During week 45, influenza A (H3N2) was detected in one sample originating from a hospitalised patient.

[http://www.hpa.org.uk/infections/topics\\_az/influenza/flureports0506.htm](http://www.hpa.org.uk/infections/topics_az/influenza/flureports0506.htm)

### ***Influenza Activity in Europe***

The intensity of clinical influenza activity in Europe remains low. Laboratory confirmed cases of influenza have only been found sporadically since week 40 2005 in the Czech Republic, England, Estonia, Poland, Scotland, and in Switzerland. Based on (sub) typing data of all influenza virus detections up to week 44 2005 (N=16; sentinel and non-sentinel data), 8 (50%) were A (unsubtyped), 2 (13%) were A (H3), 1 (6%) was A (H1N1) and 5 (31%) were B. The haemagglutinin of the influenza A (H1N1) virus from Switzerland was antigenically and genetically characterised as A/New Caledonia/20/99 (H1N1)-like. As all types and subtypes of influenza viruses that have circulated last season have been detected it remains to be seen which virus type or subtype will become dominant in Europe this season. No confirmed cases of humans infected with the avian influenza A (H5N1) virus have been reported in Europe. <http://www.eiss.org/index.cgi>

### ***Influenza Activity in Canada***

During week 44 2005, localised influenza activity was reported in parts of Manitoba and British Columbia, and sporadic activity was reported in parts of Ontario, while the rest of Canada reported no activity. ILI rates remain within the expected range for the time of year, with 24 ILI cases reported per 1000 patient visits. The Public Health Agency of Canada received 1056 reports of laboratory tests for influenza during week 44, with 5 positive for influenza A. During week 44, one new outbreak was reported in a long-term care facility in British Columbia. To date this season, three outbreaks have been reported. Since the start of the 2005/2006 influenza season, the National Microbiology Laboratory has antigenically characterised 5 influenza viruses; four A/California/07/04-like viruses and one B/Shanghai/361/02-like. <http://www.phac-aspc.gc.ca/fluwatch/index.html>

### ***Influenza Activity in the United States***

During week 44 2005, influenza activity was low in the United States. The proportion of patient visits to sentinel providers for ILI and the proportion of deaths attributed to pneumonia and influenza were below baseline levels. Sixteen states, New York City, and Puerto Rico reported sporadic influenza activity, 34 states and the District of Columbia reported no influenza activity. During week 44, WHO and NREVSS laboratories reported 951 specimens tested for influenza viruses, 2 (0.2%) of which were positive: 1 influenza A (unsubtyped) and 1 influenza B virus. Since October 2 2005, WHO and NREVSS laboratories have tested a total of 7,535 specimens for influenza viruses and 44 (0.6%) were positive. Among the 44 influenza viruses, 37 (84.1%) were influenza A viruses and 7 (15.9%) were influenza B viruses. Eighteen (48.6%) of the 37 influenza A viruses have been subtyped and all were influenza A (H3N2) viruses. <http://www.cdc.gov/flu/>

### ***Influenza Activity Worldwide***

During week 44 2005, Australia (1 B), China (1 A H1, 2 A unsubtyped & 6 B), Mexico (1 A H1, 9 A H3 & 10 A unsubtyped), Mongolia and Ukraine all reported sporadic influenza activity. One influenza A (H3) virus was reported from Israel and no influenza activity was reported in Argentina during week 44 2005. <http://gamapserver.who.int/GlobalAtlas/home.asp>

### ***Avian Influenza***

As of the 14<sup>th</sup> of November 2005, 126 confirmed human cases and 64 deaths of avian influenza A (H5N1) cases have been reported to the WHO from Indonesian, Vietnam, Thailand and Cambodia.

Further information on avian influenza is available on the following websites:

WHO [http://www.who.int/csr/disease/avian\\_influenza/en/](http://www.who.int/csr/disease/avian_influenza/en/)

HPSC <http://www.hpsc.ie/A-Z/Respiratory/AvianInfluenza/>

ECDC <http://www.ecdc.eu.int/>

### ***Northern Hemisphere Influenza Vaccine for the 2005/2006 Season***

The members of the WHO Collaborating Centres on Influenza recommended that influenza vaccines for the 2005/2006 influenza season in the Northern Hemisphere contain the following strains:

- an A/New Caledonia/20/99(H1N1)-like virus
- an A/California/7/2004(H3N2)-like virus<sup>a</sup>
- a B/Shanghai/361/2002-like virus<sup>b</sup>

*a Candidate vaccine viruses are being developed (for further information please see WHO update at <http://www.who.int/influenza>)*

*b The currently used vaccine viruses are B/Shanghai/361/2002, B/Jiangsu/10/2003 and B/Jilin/20/2003.*

<http://www.who.int/csr/disease/influenza/vaccinerecommendations1/en/>

[www.emea.eu.int](http://www.emea.eu.int)

**Further information on influenza can be found on the [HPSC website](#)**

#### **Acknowledgements**

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**This report was produced by Dr Lisa Domegan & Dr Joan O'Donnell, HPSC**